Amendments to the Claims

The following listing of claims will replace all prior versions and/or listings of claims in the application:

1. (Currently amended): A water irrigation system, comprising:

a computer system comprising regional evapotranspiration;

a sensing unit configured to assess climatological conditions near or in a zone to be irrigated and to provide output that is a function of the climatological conditions to the computer system, and wherein the sensing unit comprises a solar panel, wherein the solar panel is configured to provide output that is a function of the received sunlight to the computer system; and wherein the computer system is configured to assess zonal evapotranspiration at least partially based on the output provided by the sensing unit; and

wherein the computer system is configured to:

assess an irrigation need of the zone to be irrigated at least partially based on the regional evapotranspiration and the assessed zonal evapotranspiration;

assess solar insolation based on the output from the solar panel; and

inhibit irrigation of the zone when the assessed solar insolation exceeds a predetermined value.

2. (Original): The water irrigation system of claim 1, wherein the computer system is configured to control irrigation of the zone to be irrigated to at least meet the irrigation need of the zone to be irrigated.

3. (Original): The water irrigation system of claim 1, wherein the computer system is configured to assess the irrigation need of the zone to be irrigated at least partially based on the assessed climatological conditions.

4. (Original): The water irrigation system of claim 1, wherein the computer system is configured to assess the irrigation need of the zone to be irrigated at least partially based on the assessed climatological conditions, and wherein the computer system is configured to at least meet the irrigation need of the zone to be irrigated.

5. (Original): The water irrigation system of claim 1, wherein the computer system is configured to assess a water requirement of the zone to be irrigated at least partially based on the regional evapotranspiration and the assessed zonal evapotranspiration.

6. (Original): The water irrigation system of claim 1, wherein the computer system is configured to control irrigation of the zone to be irrigated at least partially based on the regional evapotranspiration and the assessed zonal evapotranspiration.

7. (Original): The water irrigation system of claim 1, wherein the computer system is configured to control irrigation of the zone to be irrigated at least partially based on the regional evapotranspiration, the assessed zonal evapotranspiration, and the assessed climatological conditions.

8. (Original): The water irrigation system of claim 1, wherein the computer system is configured to assess the irrigation need of the zone to be irrigated at least partially based on a stress factor.

9. (Original): The water irrigation system of claim 1, wherein the computer system is configured to assess the irrigation need of the zone to be irrigated at least partially based on a type of vegetation in the zone to be irrigated.

10. (Original): The water irrigation system of claim 1, wherein the computer system is configured to control irrigation of the zone to be irrigated at least partially based on the assessed climatological conditions.

11. (Original): The water irrigation system of claim 1, further comprising one or more valves that are operated by the computer system.

12. (Original): The water irrigation system of claim 1, further comprising one or more valves that are operated by the computer system, wherein at least one of the valves is coupled to one or more conduits, and wherein at least a portion of each conduit is configured to carry water.

13. (Original): The water irrigation system of claim 1, further comprising one or more valves that are operated by the computer system, wherein at least one of the valves is coupled to one or more conduits, and wherein at least a portion of each conduit is configured to carry water, and one or more irrigation devices, wherein at least one of the irrigation devices is coupled to at least one of the conduits.

14. (Original): The water irrigation system of claim 1, further comprising one or more valves that are operated by the computer system, wherein at least one of the valves is coupled to one or more conduits, wherein at least a portion of each conduit is configured to carry water, and a source of water that is coupled to at least one of the conduits.

15. (Currently amended): A method of controlling irrigation, comprising:

receiving sunlight with a solar panel;

assessing solar insolation based on the received sunlight;

assessing climatological conditions near or in a zone to be irrigated;

using at least the assessed climatological conditions to assess zonal evapotranspiration; ~~and~~

controlling irrigation of the zone to be irrigated at least partially based on regional evapotranspiration and the assessed zonal evapotranspiration; and

inhibiting irrigation of the zone if the assessed solar insolation exceeds a predetermined value.

16. (Original): The method of claim 15, further comprising controlling irrigation at least partially based on the assessed climatological conditions.

17. (Original): The method of claim 15, further comprising assessing a water requirement of the zone to be irrigated at least partially based on the assessed zonal evapotranspiration and the regional evapotranspiration.

18. (Original): The method of claim 15, further comprising assessing an irrigation need of the zone to be irrigated at least partially as a function of a stress factor.

19. (Original): The method of claim 15, further comprising assessing an irrigation need of the zone to be irrigated, wherein the irrigation need is at least partially based on the regional evapotranspiration and the assessed zonal transpiration.

20. (Original): The method of claim 15, further comprising assessing an irrigation need of the zone to be irrigated, wherein the irrigation need is at least partially based on the regional evapotranspiration, the assessed zonal transpiration, and the assessed climatological conditions.